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## 1984: The Second Year of Recovery

### In this issue . . .

Along with the annual appearance of the jolly bell ringers on street corners and the advertisements for perfume on television, we offer our forecast for the year ahead. Tradition, this year, will be followed with glee.

There have been few times in the professional careers of the authors of this issue when the road ahead appeared to be so unencumbered. There is a considerable convergence of views about the year ahead, rather than the divergence normally present in the economics profession. Perhaps the smoothness of the road, with its progressive but not excessive rise, is but a mirage, a collective fantasy induced by ingestion of bad data washed down by euphoric libations. But if the path ahead is as smooth and wide as indicated here, then 1984 will be that prosperous and happy new year we wish our friends and faithful readers.

Morton J. Marcus  
Editor

### Indiana Business Review

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### R. Jeffery Green

*Professor of Economics, Indiana University, Bloomington*

The U.S. economy performed better in 1983 than it has in any year since 1978. From the end of 1982 to the end of 1983 it is anticipated that constant dollar GNP will have risen 6.6%. As a result, the unemployment rate by the end of the year should be about 2.5 percentage points below its level a year earlier. These are remarkable achievements, but not unanticipated. In June our forecast was for a growth rate in excess of 5% for the last half of the year. That growth rate now appears to be near 7%. With this solid performance in the first year of the current recovery, what lies in store for 1984?

It is expected that economic growth will slow in 1984 from its torrid and unsustainable pace in 1983. From the end of 1983 to the end of 1984 constant dollar GNP should grow by about 4.5%. This would represent a solid second year of economic recovery and would produce a sufficient number of jobs to lower the unemployment rate to about 7.5% by the end of 1984.

The sectors of the economy which lead the recovery in 1983 are also expected to lead in 1984. The automobile industry, which posted large gains this year, is expected to reach a level of total sales in 1984 of 10 million units. If realized, this would be the best performance for the industry since 1979. Housing is expected to peak in 1984 with more than 1.8 million units started during the year, which would be the highest level since 1978.

In addition to these sources of strength, two others are expected to make major contributions to economic growth in 1984. The first is inventory investment. During 1982 and the first half of 1983, many firms had excess inventories in relation to the then-depressed levels of sales and, as a result, production was cut back to allow excess inventories to be reduced. By the second half of 1983, this process had been completed and production could rise to meet the higher level of sales. In 1984, not only will sales continue at healthy rates but firms will actually invest in inventories to bring inventories up to the higher level of

sales. This inventory investment will be an additional source of demand and hence contribute to growth.

The other strong sector in 1984 will be business expenditures for plant and equipment. Normally plant and equipment investment expenditures continue to decline for some time after the rest of the economy has begun to recover. Last year the economy as a whole began to recover in the first quarter and investment expenditures turned up in the second quarter. This upturn is gaining in strength and will be a significant source of growth in 1984. The reasons for the increased levels of investment spending are not hard to find. The recovery itself in 1983 created both increased operating rates and increased profits. Thus, many firms found a need for modernization and, in some cases, capacity expansion occurring at the same time that the profits necessary to finance the expenditures were also rising. In addition, 1984 will be the first year since the passage of the 1981 tax bill that firms will be in a position to take full advantage of all of the investment incentives in the bill. The result of all this should be a very strong year for firms producing capital goods.

While we have identified a number of strong sectors in the economy in 1984, not all will show solid growth. The conspicuous exception will be the export sector which is expected to show little improvement in 1984. The combination of a slow recovery for our major trading partners (excluding Japan and Canada) and the appreciation of the U.S. dollar has reduced the demand for U.S. goods in foreign markets. This situation may improve in the last half of next year, but, for the year as a whole, exports will not contribute to economic growth.

Despite the forecast for solid economic growth in 1984, we expect no resurgence of inflation. In late 1982 and early 1983 consumer prices rose very slowly or even declined as excess inventories were reduced. By late 1983 consumer prices were rising at about a 5% annual rate and we expect the rate to average no more than 5 to 6% in 1984.

The optimism concerning inflation is based on the remarkable slowdown in labor costs during the last two years. Unit labor costs which rose by over 10% in both 1979

## The Indiana Economy in 1984

and 1980, and which rose by more than 7% in both 1981 and 1982, are currently increasing at less than a 3% rate. This deceleration in costs is a result of smaller wage gains in depressed labor markets and improved productivity accompanying the recovery. Labor costs, and hence total costs and prices, should continue to rise at moderate rates in 1984.

Special factors sometimes cause the behavior of prices to differ from the behavior of labor costs. The most common factors tend to be large agricultural or energy price movements. Agricultural prices may rise by more than 5% in 1984 because of reduced stocks of grains and smaller livestock herds, but energy prices should rise by less than 5% since there remains an excess supply of petroleum on world markets. Thus, barring an oil production curtailment in the Middle East, consumer prices should increase in line with labor costs in 1984.

The Federal Reserve remains committed to a long-term policy of attempting to keep inflation rates down by maintaining moderate rates of growth of the monetary aggregates. The combination of a stronger economy and modest monetary growth will produce some upward pressure on interest rates. However, with the economy slowing later in the year, we expect the increase in rates to be not much more than 100 basis points—indicating rates should continue well below their 1981 and 1982 levels.

The large federal deficits will continue into 1984. It now appears unlikely that any measures to reduce the deficit through higher taxes and/or lower spending will survive the election year politics of 1984. That will make deficit reduction a major priority for 1985. The large deficit could pose problems in terms of crowding out private investment in later years and problems of gigantic deficits in the next recession, but the deficit should not be a major economic problem in 1984.

Overall, with economic growth continuing, with inflation remaining moderate and with the unemployment rate continuing to decline, 1984 will be a very good year. The challenge to policy makers will be to provide a framework for a recovery that will extend well beyond its second year. □

Morton J. Marcus

*Research Economist, Division of Research,  
Indiana University Graduate School of  
Business*

*This forecast was prepared by Gary R. Albrecht, Cary A. Harmon, and Richard L. Pfister based on the national forecast reported above by R. Jeffery Green. Comments and interpretations are those of the author.*

Nineteen eighty four is going to be a considerable improvement over 1983 for the economy of Indiana. Although the state will not grow as rapidly as the nation in the year ahead, the rate of economic expansion will be the best experienced by the state since 1978. These good prospects are the forecast of the Econometric Model of Indiana (EMI) prepared by the Division of Research in Indiana University's School of Business in cooperation with the Department of Economics in the College of Arts and Sciences.

In 1984, the state's personal income will rise by 7.8%, before adjustment for inflation, employment will grow by more than 82,000 jobs, and the number of persons unemployed will shrink by nearly 50,000. The gains for the state's businesses will be spread over virtually every sector. Rising incomes and falling unemployment will cut the state's unemployment benefit payments by nearly \$120 million.

### Personal Income Gains

The record of Indiana's personal income since 1976 is shown in Table 1. In nominal terms, before adjustment for inflation, personal income has grown each year. The I.U. estimate for 1983 is \$57.7 billion in personal income for the citizens of the state. This important figure is the basis for retail trade, the size of the market available to Hoosier businesses, and the source of tax revenues for our state and local governments. The EMI forecast for 1984 is \$62.2 billion, a growth of 7.8% in nominal terms, and of 3.5% after adjusting for price increases of approximately 4.3% in the year ahead.

From Table 1 it is easy to see that the forecasted gain in personal income for

Table 1  
Indiana Personal Income (in billions of dollars)

| Year | Amount | Change | Percent Change |      |
|------|--------|--------|----------------|------|
|      |        |        | Nominal        | Real |
| 1976 | 33.54  | +3.46  | +11.5          | +6.0 |
| 1977 | 36.97  | +3.43  | +10.2          | +4.2 |
| 1978 | 41.43  | +4.46  | +12.1          | +4.7 |
| 1979 | 46.14  | +4.71  | +11.4          | +2.2 |
| 1980 | 48.83  | +2.69  | +5.8           | -4.0 |
| 1981 | 53.47  | +4.64  | +9.5           | +1.0 |
| 1982 | 54.82  | +1.35  | +2.5           | -3.1 |
| 1983 | 57.66  | +2.84  | +5.2           | +1.2 |
| 1984 | 62.18  | +5.14  | +7.8           | +3.5 |

1984 will be the largest, in absolute amount, in any of the nine years shown. If realized, the gain of \$5.1 billion will be 22% greater than the combined gains of 1982 and 1983.

In real terms, adjusting for anticipated inflation, the advance in Indiana's personal income will be 3.5%, which exceeds the gain made in every year except 1979.

Indiana's expected nominal increase of 7.8% does not match the 8.6% increase forecast for personal income in the country as a whole for 1984. As a result, Indiana's share of personal income will continue to decline, slipping to 2.09% in 1984. This decline has been fairly continuous for more than a decade.

### Employment Gains

The increased sales of automobiles and housing across the nation, plus a resurgence in business investment, will aid Indiana in the year ahead. A widespread recovery at the national level offers Hoosier businesses good opportunities for growth.

Final Indiana employment figures for 1983 will not be available for several months but, based on estimates made by the Division of Research, EMI forecasts an increase of 82,600 in total employment in 1984. (See Figure 1 and Table 2.) Durable goods manufacturing activity, expanding along with the national economy, will account for about 38% of the increased employment activity, or 31,300 jobs. Some of these jobs will be filled by persons recalled from layoffs, but it is not possible to determine what percentage of the jobs are new and what percentage are being reinstated by callbacks. Much of the gain in

Table 2

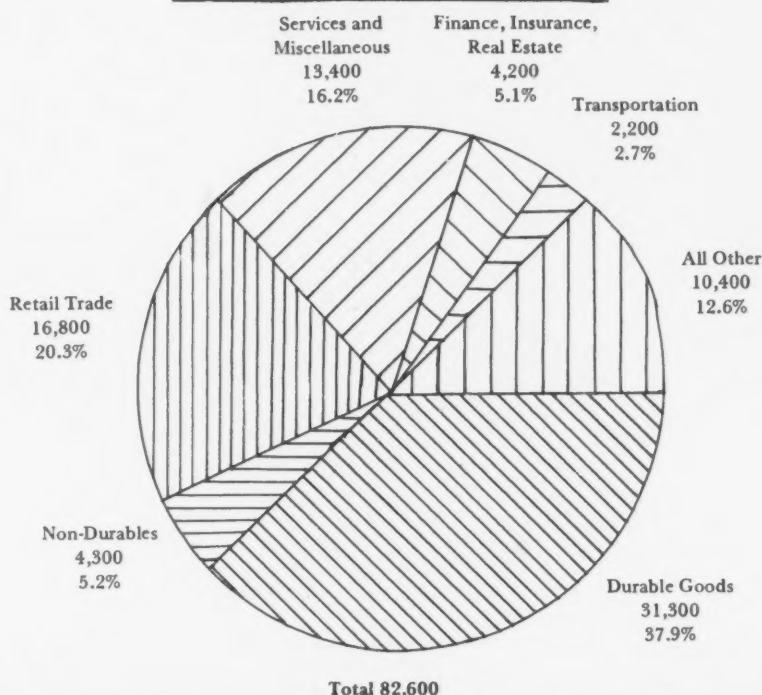
## Change in Employment, 1983-1984, By Sector

| Sector                                               | Number         | Percent     |
|------------------------------------------------------|----------------|-------------|
| <b>Total</b>                                         | <b>+82,600</b> | <b>+3.7</b> |
| <b>Manufacturing</b>                                 | <b>+35,600</b> | <b>+6.2</b> |
| Durable Goods                                        | +31,300        | +7.6        |
| Furniture                                            | +1,000         | +5.8        |
| Primary Metals (excluding steel)                     | +3,100         | +10.2       |
| Steel                                                | +2,500         | +4.7        |
| Fabricated Metals                                    | +3,800         | +8.2        |
| Non-electrical Machinery                             | +5,200         | +8.8        |
| Electrical Machinery                                 | +6,800         | +8.2        |
| Transportation Equipment (excluding autos and parts) | +3,000         | +9.9        |
| Autos and Parts                                      | +2,700         | +6.8        |
| Lumber and Wood                                      | +900           | +5.1        |
| Stone, Clay, and Glass                               | +1,100         | +5.9        |
| Instruments                                          | +1,100         | +9.6        |
| Other Durables                                       | +100           | +1.7        |
| <b>Non-Durables</b>                                  | <b>+4,300</b>  | <b>+2.9</b> |
| Food                                                 | -100           | -0.2        |
| Apparel and Textiles                                 | +400           | +4.3        |
| Printing and Publishing                              | +1,500         | +5.2        |
| Chemicals                                            | +700           | +2.6        |
| Rubber and Plastics                                  | +1,400         | +4.2        |
| Paper Products                                       | +500           | +4.4        |
| Oil Refining                                         | +100           | +1.7        |
| Other Non-Durables                                   | -200           | -7.8        |
| <b>Mining</b>                                        | <b>+100</b>    | <b>+0.6</b> |
| <b>Contract Construction</b>                         | <b>+1,300</b>  | <b>+1.8</b> |
| <b>Transportation</b>                                | <b>+2,200</b>  | <b>+4.2</b> |
| <b>Communications</b>                                | <b>+600</b>    | <b>+2.6</b> |
| <b>Utilities</b>                                     | <b>+400</b>    | <b>+1.6</b> |
| <b>Wholesale Trade</b>                               | <b>+1,400</b>  | <b>+1.5</b> |
| <b>Retail Trade</b>                                  | <b>+16,800</b> | <b>+4.8</b> |
| <b>Finance, Insurance, and Real Estate</b>           | <b>+4,200</b>  | <b>+4.0</b> |
| <b>Services and Miscellaneous</b>                    | <b>+13,400</b> | <b>+3.7</b> |
| <b>Other Non-Agriculture</b>                         | <b>+4,900</b>  | <b>+2.7</b> |
| <b>Agriculture</b>                                   | <b>+200</b>    | <b>+0.5</b> |
| <b>Federal Government</b>                            | <b>-100</b>    | <b>-0.2</b> |
| <b>State and Local Government</b>                    | <b>+2,000</b>  | <b>+0.7</b> |

output in manufacturing to date, and in the year ahead, will be achieved by increased productivity, either through the substitution of capital for labor in the production process or through the reorganization of tasks as work assignments and

Figure 1

## Employment Gains in Indiana, 1983-1984



work rules are modified. In number of jobs, electric machinery appears to be the big winner, with 6,800 added positions.

The rate of employment gain in durables is 7.6%, considerably ahead of the growth rate for non-durable goods, which did not experience declines of equal magnitude during the recession. Non-durable goods manufacturing is expected to grow by 2.9%, adding 4,300 jobs.

As the economic expansion continues, it reinvigorates a wide range of economic activities. With more goods produced, transportation employment in Indiana is expected to grow by 2,200 (4.2%). Increases in construction activity will add 1,300 jobs. Higher levels of consumer spending will make 16,800 more jobs possible in retail trade. More consumer confidence leads to more sales of real estate and more financial activity, with growth in finance, insurance, and real estate forecast at 4,200 jobs. The business and personal services sectors are expected to add 13,400 jobs. Small gains are expected in some large sectors. For example,

the addition of 2,000 jobs in state and local government will amount to a less than a 1% increase in number of jobs.

## Beyond the Forecast

Changes in state law, as well as the continuing changes attributable to deregulation, could produce employment variations different from those shown in Table 2. For example, if the state legislature were to repeal the inventory tax (which may take years if a constitutional amendment is necessary), there could be a growth in selected manufacturing sectors, wholesale trade, and the transportation industry. If the inventory tax has kept businesses from locating or expanding in Indiana, the combination of a national economic expansion and the repeal of that tax in Indiana could lead to growth for all of these sectors in the state's economy. Deregulation in transportation (trucking, airlines, and bus and rail service) will continue to alter the number of jobs in that industry. Indiana's locational advantage might become a significant factor in the expansion of selected

firms in this state. Realization of deregulation in telephone communications will have effects which are not part of this forecast, but which might offer Hoosier workers new opportunities in that dynamic, competitive environment.

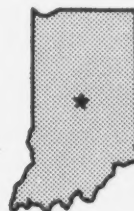
Despite the good news of this forecast, jubilation should be restrained. The forecast calls for total employment in 1984 to average 2,312,000, which remains 6.7%, or 167,000 jobs, below the 1979 level. Unemployment is expected to average more than 215,000 for the year compared with 167,000 in 1979, despite a shrinkage in the labor force of 120,000 persons.

The expanding economy of 1984 offers us an opportunity to accelerate the economic development efforts of the state. If the hard lessons of the past few years are forgotten in a thoughtless euphoria, the state will be ill-prepared for the next (and inevitable) business downturn. In an expanding economy, it will be easier for the state to train its labor force, modernize its highways, restore its bridges, and provide for the education of its children. The restructuring of the state's economy is being done by market forces; the adaptation of the state to that restructuring by providing for its future is our collective challenge. □

## Indianapolis

Robert J. Kirk

*Professor of Economics, Indiana University-Purdue University at Indianapolis*



The economic recovery has come to Indianapolis, as measured by employment gains in various sectors. The employment level of the Indianapolis metropolitan area is expected to increase by 4% during 1984. That translates into about 20,000 additional jobs on top of the Indianapolis employment base of 500,000 which, in turn, is one-fourth of the state's employment.

The recovery was initiated in the interest-rate-sensitive automobile and housing industries. Indianapolis-area automobile employment has increased by 28% from the business cycle trough; however, the current level is only 55% of the employment level at the business cycle peak in the first quarter of 1979. Housing permits have increased by 45% over 1982, a relatively weak year for housing. Home sales have increased 43% compared to the same period in 1982. Other evidence of the consumer-led recovery is provided by employment gains in the apparel and restaurant industries.

The impact of changes in the level of economic activity for various industries in the Indianapolis area can be measured in the short run by multiplier analysis. Table 1 lists multipliers for selected industries in Indianapolis. The multiplier is a way of measuring not only the direct, but also the indirect, effects of a change in the level of economic activity. For example, Western Electric has announced a phase-out of its Indianapolis plant, which currently employs 3,700 people. The multiplier of 3.0 for electrical equipment suggests that Western Electric, a firm in the electrical equipment industry, has a large number of

Table 1  
Multipliers by Selected Industries for  
Indianapolis Metropolitan Area

| Industry                 | Multiplier |
|--------------------------|------------|
| Transportation Equipment | 2.7        |
| Electrical Equipment     | 3.0        |
| Petroleum Refining       | 1.7        |
| New Hotels and Motels    | 3.0        |
| New Office Buildings     | 3.2        |

suppliers, and Western's phase-out will significantly affect other firms. The smaller multiplier for the petroleum refining industry is based on the fact that much of the industry's inputs are purchased from outside the Indianapolis area. If changes in the industry's activity occurred, they would have a smaller effect locally.

The multipliers for construction are important because the construction of several new hotels and motels has been announced or started, along with the new domed stadium. The size of the construction multipliers indicates that new construction affects a number and variety of firms in the Indianapolis metropolitan area. Renovation of the Union Station, located near the domed stadium, has begun, and will make a major contribution to the revitalization of the southwest quadrant of the downtown area.

A stronger employment picture that allows persons to establish independent residence may provide a stronger financial environment for apartment managers. During the past year, weakness in occupancy rates has resulted in an inability to raise rents, resulting in cash flow problems and deferred maintenance.

### Long-Term Perspective

How well has Indianapolis performed compared to other metropolitan areas in the region with whom it competes, and to the national economy? The time period of the analysis is 1974 (peak in business cycle) to 1982 (recession). Table 2 lists the comparisons.

The impact of the recession beginning in 1979 on the Midwest is clearly shown.

**Table 2**  
**Employment Indices for Metropolitan Areas by Selected Categories, 1974-1982 (1974 = 100)**

| <i>Metropolitan Area</i> | <i>Total Establishment Employment</i> | <i>Manufacturing Employment</i> | <i>Service Employment</i> |
|--------------------------|---------------------------------------|---------------------------------|---------------------------|
| Columbus, OH             | 108.8                                 | 83.1                            | 135.6                     |
| <b>Indianapolis</b>      | <b>108.5</b>                          | <b>86.1</b>                     | <b>142.8</b>              |
| Cincinnati               | 106.1                                 | 88.4                            | 131.0                     |
| St. Louis                | 105.4                                 | 83.2                            | 131.4                     |
| Louisville               | 99.9                                  | 71.9                            | 131.1                     |
| Chicago                  | 99.6                                  | 75.7                            | 126.9                     |
| Detroit                  | 93.7                                  | 72.2                            | 124.5                     |
| U.S.                     | 114.5                                 | 93.9                            | 141.4                     |

Total employment in Indianapolis and Columbus was essentially the same, and was weak relative to that of the U.S. because of the Midwest's dependence on durable goods manufacturing. Indianapolis' service employment growth, however, was impressive. It exceeded the U.S.'s performance, although Indianapolis was part of a multistate region that experienced relative decline.

Service employment consists of a wide range of activities; important components are business, legal, and health services. Business service employment includes credit reporting, mailing, and data processing. A closer examination of the components of service employment for Indianapolis shows that business services was a primary contributor to the impressive rate of increase, especially during the late 1970s. Some tentative explanations for the strong performance include Adam Smith's idea that markets reach a size which enables them to support a variety of specialized service-providing firms. A related hypothesis is suggested by Nobel prize winner, George Stigler. In an article published several years ago, he pointed out that firms contract out specialized functions when the local market is large enough to support the specialized firm. Finally, economic development literature suggests that as an urban area grows, it will begin to provide goods and services that were previously imported. Thus, import substitution occurs.

A different kind of indicator of performance, related to employment change, is

the retention/attraction ratio. One way to determine how the area is perceived by persons particularly concerned with economic opportunity is to ask how the number of persons of a particular age group in 1970 changed over the decade—the retention/attraction ratio. If the ratio was 110, then for every 100 25 to 29-year-old persons in 1970 in an urban area, there were 110 35- to 39-year-old persons in 1980 in the urban area. Thus, population increase occurred because net immigration during the 1970s and a better census count in 1980 were greater than deaths during the 1970s. Table 3 provides retention/attraction ratios for selected metropolitan areas for the 25 to 29 years-of-age group in 1970 (35 to 39 years in 1980) by sex.

The table indicates that Indianapolis did a slightly better job of keeping those who were 25 to 29 years old in 1970 over

**Table 3**  
**Retention/Attraction Ratios**  
**for Selected Metropolitan Areas**

| <i>Metropolitan Area</i> | <i>Male</i> | <i>Female</i> |
|--------------------------|-------------|---------------|
| <b>Indianapolis</b>      | <b>95</b>   | <b>95</b>     |
| Louisville               | 94          | 94            |
| Chicago                  | 92          | 92            |
| Cincinnati               | 91          | 92            |
| St. Louis                | 91          | 90            |
| Detroit                  | 90          | 91            |
| Dayton                   | 88          | 90            |
| Anaheim                  | 133         | 128           |
| San Jose                 | 108         | 106           |

the 1970s decade than other metropolitan areas in the region, although the Indianapolis metropolitan area has experienced net outmigration since 1970. Anaheim and San Jose in California are listed for comparison. In separate research involving 73 metropolitan areas throughout the nation, I have observed that population shifts for age groups expected to be more responsive to differential economic opportunity (25-29 and 30-34 years of age) are positively associated with service sector employment growth and mild climates. Indianapolis may not have a mild climate but it has done relatively well in the area of service employment growth. □

## Evansville

Maurice Tsai

*Professor of Economics, University of Evansville*



In 1983 the Evansville economy performed about 3% above the 1982 level despite a major local strike in the second quarter. The accompanying Table shows how the local economy performed in 1983. The outlook for 1984 is optimistic—continuous growth for various sectors, especially industrial production and retail sales.

In the coming year, industrial production is expected to grow due to continued prosperity. As consumer spending grows steadily, the demand for consumer durables should increase and should, therefore, benefit the Evansville area where the industrial structure is largely based on such

products. The expansion of American automobile production affects this area indirectly through the increased demand for wheel parts and glass.

Prosperity and growing personal incomes mean increased consumer spending on nondurables and service items as well. Wholesale trade, retail sales, and medical services should grow at 3% in real terms. Automobile sales should fare much better in 1984 than in 1983. Residential construction showed some gains in the second quarter of 1982 when interest rates were declining. Thereafter, the trend continued upward but at a slower rate, since interest rates had gone up again. In 1984, residential construction is expected to continue its slow growth, probably more in the high-priced housing market. Business construction was very strong in the first half of 1983 and it continued to be so, although at a slightly slower pace, in the second half. In 1984 it will play a major role in maintaining local construction activities, about 5% above the 1983 level.

The financial sector enjoyed mild

growth in 1983 and it will continue this trend in 1984, even though the inflation rate is subsiding while interest rates are not, creating a problem of high real interest rates. This will make lending activities more difficult. In addition, this sector is becoming more competitive as a result of deregulation and changes in the legal framework of financial institutions.

The weak spot in the local economy has been employment. The local strike in the second quarter resulted in some loss of jobs and potential jobs. Fortunately, the extremely hot weather last summer prompted recalls of workers by the refrigeration firm. In the second half of 1983, employment in trade and services also rose due to improved economic conditions. All these factors have contributed to fill up most of the jobs lost in the second quarter. The unemployment rate of this region has been above 10% for the first six months of 1983; the rate declined to 8.9% in September. It is expected that further improvement is probable in 1984; the unemployment rate will most likely drop below 8%. Throughout 1983 the local unemployment rate remained above the national rate, which was not the case in 1982 and earlier years.

The outlook for the 1984 Evansville economy is that it is going to be growing and prosperous, a definite departure from the 1980-82 period. The annual growth rate, in terms of the Evansville Area Business Index, is projected to be 3% or better. Industrial production, trade and services, and construction sectors will be the leaders in the upturn. The employment condition will certainly improve along the way. The economic base of this local economy, which has been widely diversified since 1957 when the departure of Chrysler left the economy in a shambles, has proved to be invaluable in avoiding another such catastrophe and in pulling out of this last recession. □

Evansville Area Business Index  
(Revised, 1977 = 100)

| Monthly Index | Industrial Production | Trade and Services | Construction | Transportation | Finance | Employment | Composite Index |
|---------------|-----------------------|--------------------|--------------|----------------|---------|------------|-----------------|
| 1983          |                       |                    |              |                |         |            |                 |
| January       | 103.58                | 103.90             | 125.49       | 93.54          | 107.42  | 102.34     | 105.06          |
| February      | 108.56                | 100.90             | 126.29       | 90.15          | 106.26  | 100.82     | 105.40          |
| March         | 103.39                | 100.69             | 132.48       | 92.35          | 97.31   | 97.29      | 103.42          |
| April         | 100.43                | 100.70             | 128.68       | 88.38          | 104.75  | 96.86      | 102.08          |
| May           | 106.27                | 102.49             | 131.38       | 90.51          | 103.82  | 96.91      | 105.03          |
| June          | 102.39                | 104.30             | 131.88       | 89.47          | 101.30  | 97.40      | 104.21          |
| July          | 107.16                | 104.87             | 110.68       | 90.41          | 103.41  | 100.08     | 104.66          |
| August        | 108.78                | 107.42             | 112.36       | 90.97          | 105.04  | 102.14     | 106.62          |
| September     | 112.07                | 107.14             | 98.37        | 92.42          | 106.28  | 103.00     | 106.59          |
| Annual Index  |                       |                    |              |                |         |            |                 |
| 1981          | 108.83                | 102.28             | 107.63       | 98.94          | 97.75   | 105.57     | 105.01          |
| 1982          | 104.52                | 102.36             | 103.62       | 93.23          | 102.40  | 102.85     | 102.64          |
| 1983 (est.)   | 106.44                | 105.11             | 120.32       | 91.44          | 104.20  | 100.38     | 105.52          |
| 1984 (proj.)  | 110.00                | 108.25             | 126.00       | 93.00          | 105.00  | 102.80     | 108.45          |

## South Bend-Elkhart

John E. Peck

*Professor of Economics, Indiana University at South Bend*



As we close out 1983, there is additional evidence to support the *IBR* forecasts over the last twelve months predicting that the South Bend and Elkhart economies are recovering from the recession of 1979-1983. Conditions in South Bend—like those in many of Indiana's industrial centers—have improved, but remain below levels attained in the pre-recession months of 1978 and 1979. Elkhart, however, has experienced a rebound of such spectacular proportions that the community's performance has attracted national attention.

Tables 1 and 2 give various indicators of local economic activity for the South Bend and Elkhart communities. The figures contained in the tables are seasonally adjusted and, with the exception of the unemployment rates, are index numbers expressed as a percentage of 1967 base-year values. In each table, comparative index numbers are averaged for 1978 (the last full year of somewhat "normal" activity experienced locally), 1982, and 1983 through August. Index numbers are also given for an August 1983 to August 1982 comparison.

### South Bend

As evidenced in Table 1, average establishment employment of the first eight months of 1983 in the South Bend SMSA was up 1.8% over 1982 levels. More significantly, the 3.2% gain in employment from August 1982 to August 1983 suggests that most improvements were made in recent months. However, these figures are still a

source of some concern since the rebound has been limited to the nonmanufacturing sector. The manufacturing indicator has been adversely influenced by the continuing loss of manufacturing employers and jobs from the area. The housing sector, which was severely depressed during the recession, continues to progress from 1982 levels. Currently the indicator of new permits issued is up 87% from the 1982 average.

While nonmanufacturing employment, housing construction, and vehicle sales have expanded, most indicators are still well below 1978 levels. Accordingly, we have considerable ground yet to cover. Several factors suggest a mild, sustained recovery throughout 1984 in the South Bend area. First, an expanding national economy will provide the primary stimulus for a rebound locally because this area is critically affected by national market conditions. Second, a recovery that is just beginning in business fixed investment is

Table 1  
Selected Indicators For South Bend (Seasonally Adjusted: 1967 = 100)

| Indicator                                     | August<br>1983 | August<br>1982 | Percent Change<br>August 1982-<br>August 1983 | Average<br>January-<br>August<br>1983 | 1982<br>Monthly<br>Average | 1978<br>Monthly<br>Average | Percent Change From<br>Average<br>1982 | Percent Change From<br>Average<br>1978 |
|-----------------------------------------------|----------------|----------------|-----------------------------------------------|---------------------------------------|----------------------------|----------------------------|----------------------------------------|----------------------------------------|
| <b>Employment Data</b>                        |                |                |                                               |                                       |                            |                            |                                        |                                        |
| Establishment Employment <sup>1</sup>         |                |                |                                               |                                       |                            |                            |                                        |                                        |
| Nonagricultural Employment                    | 112.1          | 108.6          | +3.2                                          | 110.9                                 | 108.9                      | 113.5                      | +1.8                                   | -2.3                                   |
| Manufacturing Employment                      | 74.9           | 80.5           | -7.0                                          | 75.1                                  | 80.5                       | 91.9                       | -6.7                                   | -18.3                                  |
| Nonmanufacturing Employment                   | 135.5          | 126.2          | +7.4                                          | 133.2                                 | 126.6                      | 127.0                      | +5.2                                   | +4.9                                   |
| Unemployment Rate <sup>1</sup>                | 7.7            | 9.6            | n/a                                           | 8.9                                   | 10.3                       | 5.9                        | n/a                                    | n/a                                    |
| Help Wanted Index                             | 69.2           | 53.0           | +30.6                                         | 62.7                                  | 56.1                       | 166.2                      | +11.7                                  | -62.3                                  |
| <b>Utilities<sup>2</sup></b>                  |                |                |                                               |                                       |                            |                            |                                        |                                        |
| Industrial Electricity Sales                  | 121.9          | 127.4          | -4.3                                          | 126.6                                 | 125.2                      | 107.1                      | +1.1                                   | +18.2                                  |
| Commercial Gas Sales                          | 114.0          | 114.6          | -0.5                                          | 109.1                                 | 118.6                      | 122.3                      | -8.0                                   | -10.8                                  |
| Industrial Gas Sales                          | 68.9           | 82.8           | -16.8                                         | 81.8                                  | 101.0                      | 89.0                       | -19.0                                  | -8.1                                   |
| <b>Retail Car and Truck Sales<sup>1</sup></b> |                |                |                                               |                                       |                            |                            |                                        |                                        |
| New Passenger Car Sales                       | 70.8           | 69.3           | +2.2                                          | 77.8                                  | 76.3                       | 135.1                      | +2.0                                   | -42.4                                  |
| New Truck Sales                               | 158.4          | 126.9          | +24.8                                         | 175.8                                 | 137.7                      | 335.1                      | +27.7                                  | -47.5                                  |
| <b>Housing Construction Data<sup>3</sup></b>  |                |                |                                               |                                       |                            |                            |                                        |                                        |
| Estimated Value of Permits                    | 255.8          | 66.1           | +287.0                                        | 223.9                                 | 116.3                      | 400.0                      | +92.5                                  | -44.0                                  |
| Number of Permits Issued                      | 85.6           | 20.7           | +313.5                                        | 62.9                                  | 33.6                       | 159.7                      | +87.2                                  | -60.6                                  |
| Average Value Per Permit                      | 346.7          | 373.2          | -7.1                                          | 383.8                                 | 370.3                      | 265.2                      | +3.6                                   | +44.7                                  |

<sup>1</sup>South Bend SMSA.

<sup>2</sup>City of South Bend.

<sup>3</sup>St. Joseph County excluding the cities of South Bend and Mishawaka.

Source: The Bureau of Business and Economic Research, Indiana University at South Bend.

**Table 2**  
**Selected Indicators For Elkhart (Seasonally Adjusted: 1967 = 100)**

| <i>Indicator</i>                             | <i>August<br/>1983</i> | <i>August<br/>1982</i> | <i>Percent Change<br/>August 1982-<br/>August 1983</i> | <i>Average<br/>January-<br/>August<br/>1983</i> | <i>1982<br/>Monthly<br/>Average</i> | <i>1978<br/>Monthly<br/>Average</i> | <i>Percent Change From<br/>Average<br/>1982</i> | <i>Percent Change From<br/>Average<br/>1978</i> |
|----------------------------------------------|------------------------|------------------------|--------------------------------------------------------|-------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------------------|-------------------------------------------------|
| <b>Employment Data</b>                       |                        |                        |                                                        |                                                 |                                     |                                     |                                                 |                                                 |
| Establishment Employment <sup>1</sup>        |                        |                        |                                                        |                                                 |                                     |                                     |                                                 |                                                 |
| Nonagricultural Employment                   | 147.3                  | 124.7                  | +18.1                                                  | 139.4                                           | 125.2                               | 152.3                               | +11.3                                           | -8.5                                            |
| Manufacturing Employment                     | 134.7                  | 107.6                  | +25.2                                                  | 124.4                                           | 107.7                               | 145.1                               | +15.5                                           | -14.3                                           |
| Nonmanufacturing Employment                  | 267.8                  | 241.6                  | +10.8                                                  | 260.1                                           | 243.0                               | 262.7                               | +7.0                                            | -1.0                                            |
| Unemployment Rate <sup>1</sup>               | 6.0                    | 9.8                    | n/a                                                    | 7.1                                             | 10.5                                | 4.9                                 | n/a                                             | n/a                                             |
| <b>Utilities<sup>2</sup></b>                 |                        |                        |                                                        |                                                 |                                     |                                     |                                                 |                                                 |
| Industrial Electricity Sales                 | 184.0                  | 164.8                  | +11.6                                                  | 169.6                                           | 165.3                               | 150.4                               | +2.6                                            | +12.8                                           |
| Commercial Gas Sales                         | 166.5                  | 170.4                  | -2.3                                                   | 159.8                                           | 166.8                               | 166.0                               | -4.2                                            | -3.7                                            |
| Industrial Gas Sales                         | 254.9                  | 247.9                  | +2.8                                                   | 260.9                                           | 250.5                               | 240.3                               | +4.2                                            | +8.6                                            |
| <b>Housing Construction Data<sup>3</sup></b> |                        |                        |                                                        |                                                 |                                     |                                     |                                                 |                                                 |
| Estimated Value of Permits                   | 216.0                  | 100.0                  | +116.0                                                 | 207.7                                           | 101.4                               | 313.4                               | +104.8                                          | -33.7                                           |
| Number of Permits Issued                     | 72.2                   | 42.0                   | +71.9                                                  | 80.8                                            | 44.3                                | 184.3                               | +82.4                                           | -56.2                                           |
| Average Value Per Permit                     | 295.3                  | 235.9                  | +25.2                                                  | 261.9                                           | 241.2                               | 180.2                               | +8.6                                            | +45.3                                           |

<sup>1</sup> Elkhart SMSA.

<sup>2</sup> City of Elkhart.

<sup>3</sup> Elkhart county excluding the Cities of Elkhart and Goshen.

All construction data has a base year of 1970.

Source: The Bureau of Business and Economic Research, Indiana University at South Bend.

good news for the South Bend area, since a sizable proportion of durable goods employment locally is centered in the capital goods sector. Twenty-three percent of manufacturing employment alone is comprised of electrical and nonelectrical machinery. Finally, the long-awaited impetus of AM General's work on the Hummer, which has been designed to replace the legendary Jeep, and which is scheduled to swell employment by some 800 jobs initially, will affect the local area in the spring of 1984 as production on the Hummer gets underway.

Given these and other factors influencing short-run conditions in South Bend, the local employment indicator should advance 3 to 4% (some 3,200 jobs) by the fourth quarter of 1984. Such a gain would continue the modest recovery that began locally in early 1983.

#### Elkhart

Indicators confirm that the recovery in

Elkhart has been phenomenal. Nonagricultural employment was up 18.1% from August 1982 to August 1983—up more than 25% in manufacturing alone. A look at the data behind these numbers show that the recreational vehicle sector of Elkhart's economy has led the advance; 54% of the increase in manufacturing employment came directly from RV firms. Fabricated textile products and the rubber and plastic components of manufacturing led the nondurables sector—and a good-sized portion of that activity is also RV related. Elkhart had the sixth lowest unemployment rate of Indiana's ninety-two counties in August; it ranked twenty-seventh throughout 1982 and seventy-third in May 1980 when things were darkest in Elkhart.

Table 2 shows that the other indicators of Elkhart activity—energy sales and housing permits—are also improved, but as was the case in South Bend, pre-recession employment and housing levels have not

been restored. Substantial improvement should continue, however, as prospects for local industries are generally felt to be very positive. The RV industry is working on the assumption that 1984 shipments will increase by some 13% after increasing nearly 25% in 1983. That level of performance would bring the industry back to about where it was in 1978, before the disastrous decline in 1979. Manufactured housing, another important local industry, should also see gains, possibly in the 20% to 25% range. Overall, the outlook for Elkhart is very optimistic. In fact, earlier *IBR* forecasts of the degree of recovery were too conservative. In light of the exceptional growth to date in Elkhart, one should expect employment to expand by another 5% to 6% (about 4,000 jobs) by early fall 1984.

Both the South Bend and Elkhart economies are recovering from the long recession, one faster than the other perhaps, but both steadily. □

## Richmond



Ashton I. Veramallay

*Director of the Center for Economic Education at Indiana University East*

The Richmond area economy is recovering from the adverse effects of the 1981-82 recession. Local producer confidence is rising for the first time since 1981. In fact, about 90% of the firms surveyed expect better economic times ahead. This means that the trend of layoffs and idle plant capacity that was predominant in both the manufacturing and non-manufacturing sectors during the recession is being reversed. The prevailing conditions of lower inflation and higher consumer demands have contributed to this reversal. The enterprises which suffered the most during the economic slump, such as transportation equipment, electrical machinery, non-electrical machinery, construction, and real estate, can expect a robust fourth quarter this year and first two quarters of 1984. The local recovery will depend on conditions which are conducive to sustaining the national recovery.

If inflation reignites and real rates of interest remain relatively high, both producer confidence and consumer demand will be dampened. This, in turn, will abort the local recovery since Wayne county's economy is highly interdependent with and interrelated to the national economy. For example, a slump in auto sales at the national level has far-reaching effects in terms of employment, income, and output on the local economy, which is a key producer of transportation-related components.

In addition to improved producer confidence, there has been a rise in consumer confidence. Wholesale and retail trade is showing marked improvement as consumers release pent-up demand for durable goods. Consumers, being more certain about their job prospects, vis-a-vis the national economy, are spending again on

big-ticket items such as home appliances, computers, video games, furniture, stereos, and televisions. Such increased consumer spending, aided by the growth in real personal income, will undoubtedly generate multiplier effects within the local economy. It is important to note that consumption spending accounts for a significant proportion of the gross local income. Therefore, retail sales will eventually set the pace for economic activity. Local retailers can expect an unusually favorable fourth quarter this year if consumers maintain their intense demand for durable goods. This phenomenon is quite the opposite of last year's gloomy performance which I had forecast.

However, behind this upbeat mood of producers and consumers, I detect a dark cloud. It involves the federal budget deficits which are projected to grow larger during the next four years. If discipline is not imposed upon deficit spending, there could be a resurgence of inflation beyond 1984. At present, I do not detect any strong inflationary pressures building up in the economy despite the trends in monetary aggregates and food prices.

Furthermore, a debt moratorium by the developing countries could seriously disrupt our national and local economic recovery by lowering output, employment, and exports, and by increasing the federal funds rate. An increase in this rate and other rates of interest will weaken automobile sales and housing activity. The moratorium would also cripple many commercial banks, push the U.S. economy to the brink of recession, and put the Federal Reserve Board in charge of both the debt crisis and the burgeoning national debt.

In summary, I expect a vigorous fourth-quarter recovery in the local economy with spin-off effects into mid-1984, depending on the overall strength of the U.S. economy. □

## Muncie-Anderson



Robert R. Jost

*Professor of Economics, Ball State University*

On its first anniversary, the nation's robust recovery continues to make a shambles of last year's forecasts. The *IBR* forecast, which translated to almost a 5% real growth rate, measured from 1982:4 to 1983:4, is much closer to the 6.5% real growth experienced than last year's consensus forecasts. The *IBR* forecast for continued economic expansion in 1984 at 4 to 5% above the 1983 level has a probability of perhaps 70%, based on past business cycle history. Nevertheless, a less desirable scenario cannot be ruled out given uncertainty about interest rates, budget deficits, Federal Reserve policy, and less-developed-country (LDC) debt problems.

In June 1983, I reported that there was no recovery euphoria in the Muncie-Anderson SMSAs but that signs of a turnaround were evident. One of the signs was the Muncie Business Index compiled by the Bureau of Business Research at Ball State University. This index provides perspective on and a crude measure of the economic debacle that has plagued the Muncie economy. Based on 1967 = 100, the index peaked at 132 in December of 1977 and almost breached the 130 mark three more times in 1978. From 129 in December of 1978, the index has generally trended downward, bottoming at very close to 100 for five consecutive months—June through October of 1982. Fluctuations aside, a most modest uptrend can be traced from that point in 1982 to the latest reading of 112 in September 1983. Substantial gains were recorded for manufacturing, retailing, real estate transactions, and automobile and truck sales in September. Fourth-quarter activity should continue this upward trend, resulting in better times for Muncie businesses. Housing, represented by deed recordings, was reported up 47% from the first quarter of 1982, and these gains have been main-

tained through the first ten months of 1983. Nevertheless, these heady gains must be kept in perspective; remember that 1983 recordings are running 33% below those of 1978, and the same reasoning applies to the modest gains of the Muncie Business Index. In short, Muncie has a great deal of lost ground to make up before attaining 1978 levels.

The news media makes much ado about the relative unemployment rates in the Muncie and Anderson areas, as if this one measure provides an index of the economic well-being of these respective communities. Such usage has always posed serious statistical problems to the user, but given the definitional and methodological gymnastics the unemployment concept has undergone since 1973, the unemployment numbers can only be construed as seriously deficient in providing such information. Establishment employment, however, attempts to measure the number of jobs in a given area and, while by no means free of pitfalls, provides a significantly better avenue for assessing economic trends in an economy. An analysis of the accompanying Table provides a more meaningful perspective on

structural changes and trends in the Muncie-Anderson SMSAs.

For the state, manufacturing as a percentage of establishment employment between 1973-83 declined from 37 to 28%, while nonmanufacturing increased from 63 to 72% of the establishment employment total. During the same period, Muncie witnessed a more dramatic relative decline in manufacturing—from 35 to 23% of establishment employment—whereas nonmanufacturing grew from 65 to 77% of Muncie's establishment employment, a figure significantly greater than that of the state. Comparable 1973 data is not available for Anderson, but for 1977, manufacturing still constituted 50% of establishment employment in Anderson; by 1983, it had declined to 40%. For the same time period, nonmanufacturing grew from 50 to 61% of establishment employment in Anderson, a figure which is still significantly below that of the state.

Some significant trends can be derived from the table. In terms of percentage changes, for example, Indiana's establishment employment declined 2.3% from 1973 to 1983, whereas manufacturing de-

clined 26%. For the Muncie SMSA, the declines were 7.5% and a whopping 38.7%, respectively. In the years 1979-1983, establishment employment declined 11.5% in Indiana, 12.2% in Muncie, and a precipitous 17.7% in Anderson. Unquestionably, Anderson was much more severely hurt than Muncie by this economic debacle, but the differences in the unemployment numbers miserably fail to reveal the magnitude of the contrast. For manufacturing, from 1979 to 1983, the percentages dropped -23.4% for the state, -30.4% for Muncie, and -30.2% for Anderson. Nonmanufacturing, however, declined roughly 5% for each of the areas. Thus, these establishment employment declines from 1979 to 1983 mark a time of travail for both Indiana and the Muncie-Anderson SMSAs. Indeed, these data make the *IBR* econometric forecast for the state, which requires four years of strong recovery to get real wages and salaries back to 1979 levels, more palatable by comparison.

Still, recovery—although not exuberant—is in the making. The *monthly* figures for establishment employment for 1983 reveal a definite upward trend for Indiana

Establishment Employment Statistics for Muncie and Anderson SMSAs

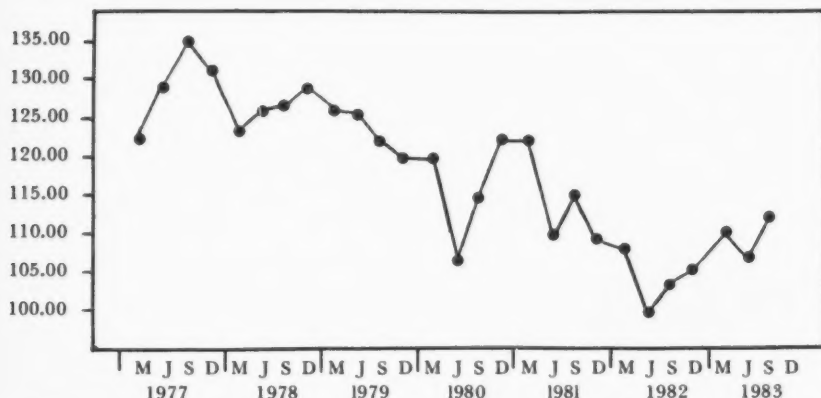
| Indiana                        | 1973 <sup>1</sup> | % of EE <sup>2</sup> | 1975   | % of EE | 1977   | % of EE | 1979   | % of EE | 1982   | % of EE | 1983 <sup>3</sup> | % of EE |
|--------------------------------|-------------------|----------------------|--------|---------|--------|---------|--------|---------|--------|---------|-------------------|---------|
| Total Establishment Employment | 2030.7            | 100.0%               | 1944.2 | 100.0%  | 2119.1 | 100.0%  | 2241.7 | 100.0%  | 2011.6 | 100.0%  | 1985.0            | 100.0%  |
| Manufacturing                  | 758.2             | 37.3%                | 647.2  | 33.3%   | 713.2  | 34.0%   | 733.2  | 33.0%   | 583.3  | 29.0%   | 561.6             | 28.3%   |
| Durable                        | 588.5             | 29.0%                | 492.3  | 25.3%   | 547.6  | 26.0%   | 564.8  | 25.2%   | 430.5  | 21.4%   | 410.8             | 20.7%   |
| Nondurable                     | 169.7             | 8.4%                 | 154.9  | 8.0%    | 165.6  | 8.0%    | 168.4  | 7.5%    | 152.8  | 8.0%    | 150.8             | 7.6%    |
| Nonmanufacturing               | 1269.8            | 63.0%                | 1294.4 | 67.0%   | 1400.8 | 66.1%   | 1503.1 | 67.1%   | 1427.0 | 71.0%   | 1421.2            | 71.6%   |
| Muncie                         | 1973              | % of EE              | 1975   | % of EE | 1977   | % of EE | 1979   | % of EE | 1982   | % of EE | 1983              | % of EE |
| Total Establishment Employment | 48.3              | 100.0%               | 45.4   | 100.0%  | 48.9   | 100.0%  | 50.9   | 100.0%  | 45.4   | 100.0%  | 44.7              | 100.0%  |
| Manufacturing                  | 16.8              | 35.0%                | 14.3   | 31.4%   | 14.9   | 30.4%   | 14.8   | 29.0%   | 10.4   | 23.0%   | 10.3              | 23.0%   |
| Durable                        | 14.4              | 30.0%                | 11.8   | 26.0%   | 12.0   | 25.0%   | 12.9   | 25.3%   | 8.8    | 19.3%   | 8.6               | 19.2%   |
| Nondurable                     | 2.4               | 5.0%                 | 2.5    | 5.5%    | 2.9    | 6.0%    | 1.9    | 3.7%    | 1.6    | 3.5%    | 1.6               | 3.8%    |
| Nonmanufacturing               | 31.3              | 65.0%                | 31.0   | 68.3%   | 34.0   | 70.0%   | 36.0   | 71.0%   | 35.0   | 77.1%   | 34.4              | 77.0%   |
| Anderson                       | 1973              | % of EE              | 1975   | % of EE | 1977   | % of EE | 1979   | % of EE | 1982   | % of EE | 1983              | % of EE |
| Total Establishment Employment |                   |                      | 48.2   | 100.0%  | 52.4   | 100.0%  | 52.6   | 100.0%  | 42.4   | 100.0%  | 43.3              | 100.0%  |
| Manufacturing                  |                   |                      | 24.1   | 50.0%   | 25.9   | 50.0%   | 24.5   | 47.0%   | 16.8   | 40.0%   | 17.1              | 40.0%   |
| Durable                        |                   |                      | 22.0   | 45.6%   | 24.1   | 46.0%   | 22.6   | 43.0%   | 15.3   | 36.0%   | 15.6              | 36.0%   |
| Nondurable                     |                   |                      | 2.1    | 4.4%    | 1.8    | 3.4%    | 1.9    | 3.6%    | 1.5    | 3.5%    | 1.6               | 3.7%    |
| Nonmanufacturing               |                   |                      | 24.1   | 50.0%   | 26.3   | 50.0%   | 28.1   | 53.4%   | 25.6   | 60.0%   | 26.6              | 61.0%   |

1. Figures under data columns are numbers of persons in thousands.

2. EE = Establishment Employment

3. Estimates for this year are based on 10 months of data. Columns may not add to 100 because of rounding.

Muncie Business Index



and Anderson and, to a much lesser degree, for Muncie. Anderson's recovery progress is primarily tied to 1983's improved auto production and sales.

The Guide division of GM has recalled over 900 workers since January and, with aggregate employment almost 5,000 has fewer than 300 workers on indefinite layoff. Guide is currently engaged in research and development in several nonautomotive areas—to wit, the manufacturing of furniture, medical supplies, military products, and accessories for tractors. Ventures into these areas would tend to mitigate the severity of the cyclical vicissitudes of the auto industry.

Delco, currently with 9,700 employees, has recalled more than 2,000 workers since January, with 2,250 yet on indefinite layoff; Delco's seniority call-back list now dates back to June 10, 1969. This firm recently announced the development of a new magnet which affords a 40 to 50% weight reduction in cranking motors. Some \$68 million has been authorized for its production, about half of which will be invested in the Anderson complex. Additionally, Delco has opened a sales office in Tokyo, and both Guide and Delco are aggressively bidding to provide products for foreign automobiles being produced in the United States. Currently the local Delco battery plant supplies batteries to Honda of America. As the "world car" comes closer to reality, the future of auto plants in the Muncie-Anderson SMSAs will depend increasingly on the domestic auto industry's ability to vigorously apply high technology to auto and auto parts production, extract real wage concessions from

labor, and produce a quality product that can compete in world markets. After a prolonged battling slump, one might argue that they are now on first base.

Anderson's Business Development Corporation is in the process of wooing prospective manufacturers with equity financing and low-interest loans. One hopes that Anderson's experience with the firms will prove more rewarding than that of Muncie's Industrial Revolving Fund. Originally funded with a \$5 million federal grant, eight of the ten Muncie firms receiving loans failed; the two remaining firms continued in business—with a combined employment total of 57 employees. Identifying future growth industries and screening potentially successful firms appears to be no mean task for government officials. John Hannaford, former Associate Dean of the College of Business at Ball State University, is currently working with the Muncie Area Growth Industrial Council to attract employers to Muncie via a somewhat different route. They have obtained from the Indiana Employment Security Division a profile of the skills of the unemployed and a profile of the skills needed in various industries. A strong correlation will help to identify a target industry. In addition, the designated industry study will be reinforced by cataloguing the markets and suppliers of each two digit industry which is within a day's delivery time of Muncie. The booklet will be available early in 1984.

So, at last, the trend is upward, even if the progress is slow. The Muncie-Anderson recovery has begun. □

## Fort Wayne

Thomas L. Guthrie

*Associate Professor of Business and Economics, Indiana University-Purdue University at Fort Wayne*



Assuming that the prime signal of an economic recovery is a sustained increase in employment, then the Fort Wayne area economy has yet to recover. Specifically, nonagricultural payroll employment in the four-county metropolitan area<sup>1</sup> has not changed significantly since last December. This, however, is a significant improvement over the March 1979 to December 1982 period when the area economy lost 28,000 jobs—15% of its employment. To have stopped completely that rate of hemorrhaging in the last ten months is indeed noteworthy.

In fact, the news is even better; the final step in the phase-out of the International Harvester heavy-duty truck assembly plant directly affected approximately 1,700 jobs last July, and undoubtedly more when the ripple affect is considered. Therefore, a minimum of 1,700 jobs must have been created in the area economy just to maintain the overall level of employment in the last ten months.

The additional jobs resulted either from recall of laid-off employees or creation of new jobs. The Greater Fort Wayne Chamber of Commerce—in conjunction with the City of Fort Wayne—recently claimed responsibility for the creation of 1,700 jobs through September 1983. Given the general lack of growth thus far in cyclical employment in the lake states in this recovery—except Michigan, where auto industry employment dominates—the Chamber's claim appears valid.

1. The area includes Adams, Allen, DeKalb and Wells counties. Effective June 30, 1983, the Fort Wayne metropolitan area (MSA) was redefined to include Whitley county and exclude Adams and Wells counties. However, employment data will not be switched to the new definition; accordingly, the forecast relates to the previous definition.

This is encouraging for two reasons. First, the 1,700 new jobs are certainly welcome; and second, it appears that the massive economic development effort of the Chamber and City is beginning to bear fruit.

Although trendless since last December, the technical low in employment of a seasonally adjusted 155,300 people occurred in August with termination of the IH employees. Primarily because the IH phase-out was announced a year in advance, the original 1983 forecast (November/December 1982 *IBR*) was for the cyclical low in employment to occur this last summer. Although the forecast appears likely to be realized, the employment changes thus far may also be attributed to statistical noise in the data series. Employment increased by 800 and 600 in September and October, respectively. At least one more month is needed to confirm a change in trend.

When area economic activity is measured by proxies other than employment, the signs are more encouraging, both in retailing and manufacturing. With respect to retailing, new auto sales through October 1983 totaled 9,006, compared with 7,440 for the comparable period in 1982.<sup>2</sup> Building permits issued in Allen county for the construction of new single-family houses totaled 374 through October 1983, compared with 189 through October 1982. Home sales in Allen county have increased more than 60% in the first ten months of 1983.<sup>3</sup>

With respect to manufacturing, industrial use of electricity is up 18.6% from October 1982 when compared to October 1983. The implied increase in activity apparently has been accommodated through a longer work week, rather than increased employment. Work week data are not reported for the Fort Wayne area, but

for the state the work week in manufacturing increased from 39.2 to 41.7 hours between September 1982 and September 1983.

With respect to 1984, a 2 to 3% increase in area employment appears reasonable, based upon past cyclical recovery patterns and realization of the current consensus forecast of 4 to 5% real growth at the national level.

The typical cyclical recovery pattern for the area suggests a higher rate—in the 3 to 4% range; however, the forecast was lowered for two reasons.

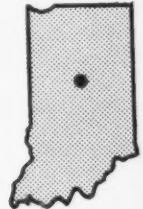
First, as a result of the severe job losses in the Fort Wayne area since 1979, exposure to the roller coaster durable-goods sector has been reduced from 28% of total employment to less than 21%. Therefore, the peaks and valleys of the future should not be as pronounced.

Second, as a result of the severe economic decline, there may still be some employed labor not being utilized fully. Accordingly, additional economic expansion may occur without an increase in employment.

The 2 to 3% forecasted gain in employment translates into a 3,000 to 4,500 employment increase, given the current employment level.

The forecasted increase is based upon cyclical factors; therefore, any significant economic-development successes which bring new jobs to the area in 1984 will push actual employment gains above the forecast, assuming the forecast is realized. □

## Kokomo-Marion



Dilip Pendse

*Associate Professor of Economics, Indiana University-Kokomo*

The wheels of economic recovery have turned much faster in the Kokomo-Marion area during the first nine months of 1983 than had been expected. This has brought about a dramatic drop in the jobless rate, a surge in home construction and home repair activity, and a swelling of the business-industrial complex.

In Kokomo the unemployment rate plunged from 17.5% in January to 7.8% in September. During the same period, Marion's unemployment rate tumbled 6.2 percentage points to 8.6%, a two-year low. Logansport and Peru, the other two industrial centers in the area, also experienced significant declines in their jobless rates.

The dramatic turnaround in the unemployment rate can be attributed to such factors as a shrinking labor force, rising factory recalls, and new jobs. Currently, 11% of the work force at Delco, Kokomo's largest employer, is on indefinite layoff, compared to 30% a year ago. Similarly, 11% of the work force at Kokomo's Continental Steel is jobless, compared to 24% a year ago. Nearly 23% of Chrysler's workers in Kokomo are still jobless. However, the jobs at the Chrysler plant are more secure now because of the renegotiated loan agreement with the state of Indiana. In Marion, the work force at Fisher Body, Marion's largest employer, has swelled to 3,000, the highest level in ten years. It now employs 200 workers laid off by Delco. As in Marion and Kokomo, many of the laid-off workers from the Exide, Switches, Small Parts, and Elco plants in Logansport are back on their jobs.

Another bright spot in the Kokomo-Marion area's economy is the reopening of

2. Data provided by 17 of 20 members of Fort Wayne New Car Dealers Association.

3. Data provided by Fort Wayne Board of Realtors.

shutdown operations and the expansion and modernization of existing plants. The Owens-Illinois plant in Gas City reopened in June, thus providing jobs for 90 people. RCA's plant in Monticello is expected to reopen soon under new ownership, thus rekindling the hopes of 400 jobless people. The work force at Marion's SCM plant swelled from 200 to 300 because the parent company's operation in Brooklyn, New York, was moved to Marion. A \$40-million expansion and modernization plan at the Fisher Body plant in Marion will create an additional 200 jobs by 1986. Kokomo's Continental Steel plant is undergoing a \$22-million modernization program. Its new rod mill will begin operating in the second quarter of 1984. A \$200 million plant expansion and modernization plan at Delco could mean jobs for 1,200 new and recalled workers by 1987. Along with Delco, the FMC plant in Tipton announced its expansion plans, thus creating jobs for 30 to 40 people in the near future.

The home construction and home repairs activity surged in the area with the improvement in the economy. For example, both in Kokomo and Howard County, the number of building permits issued during the first three quarters of 1983 was the highest since 1979. A total of 55 single-family building permits were issued in Kokomo and Howard County during the January-September period, up 150% from the same period a year ago. The number and the dollar amount of home mortgage and home improvement loans granted by Kokomo's lending institutions surpassed the levels reached in each of the last three years.

The inflation at the checkout stands at local grocery stores remained subdued during the first nine months of 1983. In Kokomo, during the January-September period, grocery prices advanced at an annual rate of 5.4%.

#### The Outlook

A survey conducted in October of 60 manufacturers, wholesalers, retailers, and

contractors in Logansport indicates that a majority expect the business conditions to improve in 1984 in their own industry, in their own operation, and in the area. Forty-one percent of manufacturers indicated that the size of their work force will increase in 1984.

The survey findings, a dramatic turnaround in the area's economy, and the anticipated further improvement in the nation's economy next year suggest that Kokomo-Marion's economy will keep humming in 1984. The expansion and modernization of the existing operations in the area will also help improve the economic health.

In more than a year, Kokomo-Marion's economy will not be hobbled by jobless rates in the mid- to upper teens. Massive layoffs will not occur in 1984. The jobless rate in the area will remain in the single-digit range for most of 1984. In Kokomo and Marion, the jobless rate could reach as low as 6% next year.

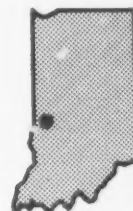
The production levels will remain high in the local manufacturing plants. Sales will remain strong in such retail businesses as food, eating and drinking, jewelry, automobiles, and appliances.

For the second consecutive year, home construction and home improvement activity will improve in the area, but with less zip than in 1983. Interest rates on home mortgage loans will hover around 13%.

The odds are strongly against double-digit inflation in 1984. Inflation at the grocery counters will creep up and linger around 6 to 7% next year.

The Kokomo-Marion area economy will mirror the continued national improvement in 1984 with lower jobless rate, higher consumer spending, a lower inflation rate, stable interest rates, and higher spending on home construction and home repairs. □

## Terre Haute



Marvin Fischbaum

*Professor of Economics, Indiana State University*

The economic recovery of Terre Haute in 1983 was stronger than had been forecasted, but was far from robust. Local conditions should continue to improve through 1984, but progress will be modest, and serious problems will persist.

A year ago Terre Haute faced, along with a slew of lesser difficulties, the closing of what had been its largest employer, the record and tape division of CBS. January 1983 marked the bottom of a four-year contraction in the area economy. Over that period, employment in manufacturing in the four-county metropolitan area fell nearly one-third to a level of 12,000, while unemployment in the area rose to an estimated 12,500. Over that same four-year period, employment in non-manufacturing establishments was relatively stable, falling 9% to 44,700. For 1983, local manufacturing was expected to improve along with the national economy. But concern was voiced that the previous declines in the manufacturing sector of the area export base might lead to subsequent reductions in dependent sectors such as retailing, services, and government.

The anatomy of the recovery differed from what was envisioned. Without seasonal adjustment, the four-county unemployment rate fell from its January peak of 15.5% to 10.1%, while the number of unemployed fell to 8,000. Allowing for seasonal factors, the drop in unemployment was more modest, from 13.9% to 11.2%, and part of that improvement might be attributed to a decline of 1.7% in the area labor force. Of the thirteen SMSAs in Indiana, Terre Haute's unemployment rate was fifth highest in January, and second highest in September. The surprise for 1983 was not so much that total employment improved, but rather, the

composition of that improvement. Except for the return of the J.I. Case workers from an extended Christmas closing, manufacturing employment has been flat. However, employment did increase in retailing, services, and construction.

The mix of manufacturing industries found in Terre Haute experienced little growth nationally. The glass container industry suffers from overcapacity resulting from the growth in the market for plastic containers. Foundries and manufacturers of construction equipment still have not benefited from recovery. With cash-strapped farmers, and with the Payment In Kind program serving as an incentive to not grow crops, manufacturers of chemicals and pharmaceuticals for agribusiness experienced slow sales. But where liberalized federal regulations brought about a booming market for truck trailers, Great Dane in Brazil responded by calling back workers and by expanding plant capacity as well.

Much local construction activity grew out of weakness rather than strength. CBS will move Columbia House out of rented facilities and into its old record plant now undergoing renovation. Empty stores may have contributed to the decision to modernize the Meadows shopping center. Success in that project may have led to imitation at Southland. Weakness does not explain the decision of CBS-Sony to locate digital audio disc production in a refurbished CBS tape plant, nor does it explain continued expansion at Eli Lilly. Most certainly, a soft local economy does not explain the decision to go ahead with the Village Quarter, a fifty-million-dollar planned unit development encompassing 425 dwelling units, along with offices and shops. Further gains in construction are difficult to envision, since, despite increased sales in the low- and moderate-price range, the local real estate market remains weak, and few local industries are straining capacity.

The growth of employment in retailing may be even harder to explain, and it too may stem from weakness. With Hills Department Stores moving into Woolco's, Lowell's No Frills replacing IGA, and with

Meis Department Store abandoning downtown for the Meadows, merchants have engaged in a flurry of promotional activity. One finds longer hours, and very attractive prices. This is good for advertising media, and good for consumers; it is not so good for profits, and is probably not sustainable.

Out of 314 metropolitan areas, *Sales Marketing and Management*, in its estimates for 1983, places the Terre Haute SMSA, under its new two-county definition, 272nd, or near the bottom, in effective buying income per household, and 17th or near the top, in retail sales per household. Mail order sales from Columbia House help explain what would otherwise be an absurd situation. This illustrates that the economic base of a region goes beyond manufacturing, mining, and agriculture, and can include, in addition to mail order sales, such activities as educational services from two colleges and a University, and correctional and custodial services from the Terre Haute Federal Penitentiary. Unfortunately, record club sales are stagnant, higher education projections for the next eight years lack promise, and the Penitentiary is aging.

Income from sources other than wages and salaries provides another exogenous—or independent—base of support for the local economy. With its concentration of elderly people, the Terre Haute SMSA garners a high proportion of its personal income, 35% in 1981, from "unearned" sources. In 1981, \$280 million from dividends, rent, and interest, together with \$265 million from transfer payments, exceeded the \$326 million in wage and proprietors income from manufacturing. This non-wage income certainly lends stability to the regional economy. But the demographic profile that accounts for this income results from previous decades of slow growth, and points to possible future decline.

The recovery of the U.S. economy, which had been strong, if spotty, in 1983, is expected to broaden in the coming year. That bodes well for Terre Haute, but the recovery will not remedy underlying structural weakness. □

## Lafayette



William C. Dunkelberg

*Associate Professor of Economics, Purdue University*

Dorothy Mansfield

*Labor Market Analyst, Indiana Employment Security Division*

The outlook for the economy has improved substantially since December 1982. At long last, the consumer began to lead the economy on the path to recovery. After three years of recession or depression (depending on which industry one is concerned with), employment has once again improved substantially, incomes are rising and, for a change, inflation seems under control, at least for the near future.

As general economic activity improved through 1983, so did the economy of the Greater Lafayette area. Industries serving the electronics, telecommunications, computer, and housing markets were the major contributors to employment growth so far this year.<sup>1</sup> Total employment at Purdue, always a stabilizing feature of the local economy, actually contracted between October 1982 and October 1983. Retail sales have picked up smartly, more than 10% above levels of a year ago,<sup>2</sup> and retail sales employment appears to have hit new highs in the third quarter.<sup>3</sup>

The Lafayette economy has picked up faster than the economy in the state as a whole. Total employment in the state will

1. Employment in 25 major industries rose by 838 since January. These industries accounted for 51% of the gain. About 35% of the gain was in non-electrical machinery and primary metals.

2. Based on a telephone survey of major retailers in late November.

3. *Labor Market Letter*, November 1983, Indiana Employment Security Division, Lafayette, Indiana.

probably not regain its peak 1979 levels until the end of 1984. In the Lafayette area, total establishment employment in January 1983 was 4,700 below its 1979 peak of 60,300 (See Table 1). But by October, 2,800 jobs had been recovered, most of those after employment hit a low of 52,800 in June of this year. Establishment employment was 58,400 in October, leaving us 1,900 jobs short of the 1979 peak. The percent of the Lafayette area work force that is employed was the highest since August 1982 (the "mini-recovery"), but remained several percentage points below 1979 levels. Employment gains through the first quarter of 1984 should bring us about two-thirds of the way back. Slower growth in 1984 will probably make employment gains less dramatic than in 1983, but we have an excellent chance of overtaking the 1979 mark by mid-year.

However, the structure of the economy in the Lafayette area will be somewhat different. Several major manufacturing employers permanently closed facilities during the recession, producing permanent job losses of about 500 employees.<sup>4</sup>

Other major employers, including some

4. At the time they were closed, approximately 450 employees lost their jobs. Normal operations provided jobs for about 680 employees. One plant was reopened under new ownership, saving about 50 jobs.

of the more newly established firms, plan little increase in employment during the next twelve months, even with the dramatic pickup in the economy.<sup>5</sup> However, the economy has recovered more quickly than expected, and new firms will be started to replace many of those that failed. This will undoubtedly contribute to employment growth that exceeds the (conservative) expectations expressed by many local employers.

Gains made in several industries have compensated for some of the manufacturing jobs lost. Wholesale and retail trade employers have made up 500 of the 700 jobs lost from the 1979 peak. Services and education each have added a net of 400 jobs in excess of the number lost from their peak levels in 1979 to January this year (Table 1).

Although erratic, building permits are showing a strong upward trend, indicating continued strength in the construction area.

Total deposits and per-capita real deposits have grown substantially. Consumers accumulated a substantial amount of liquid savings during the recession. The "excess" amounts of assets held in liquid form are

5. Based on a non-random survey of 19 firms taken earlier in the year and reported on in the last issue of the *Indiana Business Review*.

now being converted to real assets such as cars and durables. People are doing the spending that they deferred during the past few years now that uncertainties about jobs and incomes have all but vanished for most consumers.

Total payroll grew from \$625.1 million in 1979 to \$744.4 million in 1982, an increase of 18%. However, the Consumer Price Index increased from 217.4 in 1979 to 289.1 in 1982, an increase of 33%. Thus, in real terms, the purchasing power of total payroll in the area has declined by 14% since 1979.<sup>6</sup>

Overall, the economy of the Greater Lafayette area has improved since 1982, but there is still some distance to go before the 1979 levels of employment are reached again. This time, however, the prospective growth is based on strong fundamentals: consumer spending that could support the economy well into 1984 and the slight beginnings of an overdue surge in capital spending that could easily pick up any slack generated by a slowdown in consumer spending. Interest rates remain historically high, but strong sales, potential cost savings embodied in new equipment, and the high cost of maintaining and operating outdated facilities are pushing the expected return on investment high enough to begin to overcome the negative impact of high rates. Consumers have deferred spending, repaid debt, and built up a lot of liquidity. They too will increase spending, in spite of the high interest rates. Still, the recovery in Indiana will be slow in comparison to that of the nation as a whole, and the Greater Lafayette area cannot hope to be totally insulated from a relatively weaker statewide recovery. □

Table 1  
Trends in Sectoral Establishment Employment for the Greater Lafayette-West Lafayette SMSA

| Industry           | Peak<br>1979 | January<br>1983 | Change | Gains January-<br>October 1983 | Ten-Month<br>Average, 1983 |
|--------------------|--------------|-----------------|--------|--------------------------------|----------------------------|
| Manufacturing      | 12,900       | 9,900           | -3,000 | 1,000                          | 10,400                     |
| Construction       | 2,700        | 1,400           | -1,300 | 200                            | 1,580                      |
| Transportation     | 1,600        | 1,700           | +100   | -100                           | 1,600                      |
| Wholesale & Retail | 12,000       | 11,300          | -700   | 500                            | 11,230                     |
| Services           | 9,200        | 9,100           | -100   | 500                            | 9,400                      |
| Government         | 2,600        | 2,200           | -400   | 100                            | 2,350                      |
| Education          | 17,600       | 17,500          | -100   | 500                            | 16,140                     |
| Finance            | 2,900        | 2,500           | -400   | 100                            | 2,600                      |
| Total              | 60,300       | 55,600          | -4,700 | 2,800                          | 55,230*                    |

\*The employment low of 52,800 occurred in June 1983. Thus, the average level of employment for the year will still be quite low.

6. Based on covered payroll of the Indiana Employment Security Act which excludes railroads, small non-profit institutions, churches, and most agriculture.

## Gary-Hammond- East Chicago (Calumet Area)

Leslie P. Singer

*Professor of Economics and of Public and Environmental Affairs, Indiana University Northwest*



It is not often that one can begin a new forecast by saying that last nine-months' projections were just about correct, within an approximately 1% margin of error, which is just about as much error as the "official" state or local employment figures display. As indicated in Table 1, the recovery appears to be limping along with a few twists and dips but very much on a steady course. We feel that, after a delay of about nine months, this region has finally caught up with the rest of the nation. We predict a healthy resurgence in manufacturing output, no further exit by local firms, a firming up of profits, some expansion in construction, and reasonable availability of credit from local banks and financial institutions at roughly constant rates for much of 1984 and 1985. The anticipated national rebound in capital

formation will spur local production of steel and related products as the current, consumer-led recovery broadens and capital projects are taken off the shelves. Employment will, however, not fully participate with output in the rate of the current recovery. The process of trimming and slimming down will continue as expensive inputs such as labor and corporation bureaucrats are replaced at the margin by less expensive capital goods and electronic management.

In Table 2 we trace three months' moving averages of yearly differences in employment (in 1000s) showing how the current cycle in steel and total employment is related, in spite of minor discrepancies in timing, or phase, as it is called. Our forecast indicates that we are going to enter the gaining phase in 1984-85; that is, the cycle of differences will cross the zero axis and we shall be adding jobs, not losing jobs as we had done heretofore. The gains will, however, diminish as we reach the final stages of 1985 and, if the cycle is true to its past performance, a new downturn may be in the offing in 1986 or 1987. The vexing question remains of whether the global market for American steel, the lifeblood of the regional economy, is shrinking and possibly in danger of collapse.

One must, of course, distinguish be-

tween what economists call effective demand and potential demand. Clearly there is globally excess potential demand for steel in the Third World; however, this demand cannot be translated into adequate buying power.

In order to purchase American steel, Third World nations must either acquire dollars or other hard currencies through trade, or through loans or gifts. It was in response to this potential demand, often anticipated as effective demand, that the enormous increase in global steel production capacity was initiated. As the original gifts and loans and oil-generated transfers of wealth began to recede, the gap between potential and effective demand widened.

American steel companies, which had for so long operated in relatively protected and prosperous markets under a system of price leadership, were totally unprepared for the new competitive global market in steel. Moreover, because of misunderstanding of international economics, international financial institutions provided capital for Third World steel plants, ostensibly to serve domestic Third World markets. But Third World countries were incapable of absorbing all of their potential steel output, because not enough bridges, hospitals, skyscrapers, or the like could be built. Furthermore, Third World countries needed to feed their expanding urban

Table 1  
Northwest Indiana Employment and Forecast

|                              | 1981 June | 1982 June | 1982 December | 1983 March | 1983 June | 1983 September | 1983 December | 1984 March | 1984 June | 1984 September | 1984 December | 1985 March | 1985 June | 1985 September |
|------------------------------|-----------|-----------|---------------|------------|-----------|----------------|---------------|------------|-----------|----------------|---------------|------------|-----------|----------------|
| Total Employment             | 250.4     | 244.9     | 236.1         | 236.3      | 226.8     | 222.0          | 223.4         | 229.31     | 233.62    | 232.61         | 232.92        | 234.97     | 237.01    | 234.95         |
| Export Sector:               |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| Manufacturing                |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| plus Construction            | 109.02    | 98.31     | 96.31         | 92.16      | 88.41     | 82.79          | 83.05         | 86.01      | 88.32     | 88.01          | 87.02         | 89.97      | 90.31     | 89.95          |
| Steel Mills                  | 60.7      | 59.2      | 53.2          | 52.4       | 47.5      | 48.4           | 49.3          | 51.8       | 52.2      | 55.9           | 53.7          | 55.8       | 54.7      | 54.1           |
| Steel-Based Manufacturing:   |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| Manufacturing-Steel-         |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| Petroleum                    | 28.3      | 24.5      | 23.2          | 22.2       | 19.01     | 19.2           | 19.3          | 19.7       | 20.8      | 20.1           | 19.9          | 20.9       | 21.9      | 21.4           |
| Private Domestic Sector:     |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| Non-Manufacturing            |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| less government              |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| less construction            | 110.5     | 112.4     | 111.0         | 111.9      | 110.5     | 109.7          | 110.3         | 112.5      | 113.6     | 114.4          | 115.7         | 114.4      | 114.9     | 114.1          |
| Public Sector                | 32.3      | 31.5      | 31.7          | 33.1       | 31.9      | 30.0           | 30.1          | 30.8       | 31.7      | 30.2           | 30.2          | 30.6       | 31.8      | 30.9           |
| Domestic Service Sector:     |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| (retail, wholesale, finance, |           |           |               |            |           |                |               |            |           |                |               |            |           |                |
| banking, etc.)               | —         | 98.36     | 96.53         | 97.8       | 98.2      | 96.83          | 94.8          | 96.16      | 96.79     | 97.59          | 97.01         | 98.97      | 98.62     | 98.71          |
| Health Care                  | 16.0      | 17.9      | 17.9          | 18.0       | 18.2      | 18.2           | 18.0          | 17.8       | 17.7      | 17.8           | 17.6          | 17.6       | 17.6      | 17.8           |

**Table 2**  
Three Months Moving Averages of 12 Months  
Differences in Employment

| Steel Mills | Total Employment | Dates of Differences |
|-------------|------------------|----------------------|
| 7.70        | 25.77            | 3/79-3/78            |
| 7.70        | 33.80            | 6/79-6/78            |
| 2.70        | 23.51            | 9/79-9/78            |
| 3.00        | 16.13            | 12/79-12/78          |
| .70         | 12.23            | 3/80-3/79            |
| -4.10       | 1.83             | 6/80-6/79            |
| -3.70       | -4.30            | 9/80-9/79            |
| -6.50       | -10.70           | 12/80-12/79          |
| -12.10      | -22.53           | 3/81-3/80            |
| -2.30       | -17.60           | 6/81-6/80            |
| -1.10       | -9.83            | 9/81-9/80            |
| 1.10        | -6.89            | 12/81-12/80          |
| 7.10        | 2.70             | 3/82-3/81            |
| -1.50       | -1.70            | 6/82-6/81            |
| -4.90       | -9.77            | 9/82-9/81            |
| -9.70       | -13.97           | 12/82-12/81          |
| -10.70      | -16.27           | 3/83-3/82            |
| -11.20      | -18.17           | 6/83-6/82            |
| -7.80       | -16.64           | 9/83-9/82            |
| -3.60       | -4.48            | 12/83-12/82          |
| 1.55        | 2.65             | 3/84-3/83            |
| 1.85        | 4.53             | 6/84-6/83            |
| 4.69        | 6.99             | 9/84-9/83            |
| 6.18        | 10.55            | 12/84-12/83          |
| 6.47        | 14.18            | 1/85-1/84            |
| 10.54       | 17.69            | 2/85-2/84            |
| 8.39        | 17.65            | 3/85-3/84            |
| 7.13        | 16.36            | 4/85-4/84            |
| 6.25        | 13.29            | 5/85-5/84            |
| 3.14        | 9.69             | 6/85-6/84            |
| 2.82        | 7.36             | 7/85-7/84            |
| 2.43        | 5.28             | 8/85-8/84            |
| 1.62        | 6.99             | 9/85-9/84            |

populations and also to produce luxury goods, synthetics, autos, appliances; and so on for their emerging social elite. Again, hard currencies were lacking. So, perplexing as this was, Third World countries discovered that they could sell steel in the U.S. more easily and profitably than textiles, curios, coffee, or exotic hides. Of course, this was possible because American steel was not internationally competitive, partly because of high wages. Ordinarily the high cost of capital in Third World countries would have redressed this imbalance of higher wages. However, we and other Western countries have extended loans to Third World economies at lower than our own domestic rates. The advantage, with our help, was consequently absolute.

In Table 3 we look at the regional economy in a structural context. We note the dramatic decline in production workers. We note that primary metals firms experienced a serious shrinkage of their gross margins (partly due to pressure from international markets). The rate of capital formation has not seriously lagged, yet the ratios of value added to payroll continued to decline.

This ratio, call it  $k$ , is central to the regional supply function. We suspect that firms establish a desired ratio,  $k^*$ . If the actual ratio  $k$  surpasses the desired ratio, firms are surprised and are induced to expand. The reverse is true of  $k < k^*$ .

Ratios of desired to actual values are not new in economics; there are desired values of capital to actual capital stock of natural rates of interest compared to actual rates, and so on. Each divergence of desired or anticipated values from actual or ex post values is supposed to trigger an expansionary or contractionary path in output or employment. Unfortunately, no one has yet devised a method of measuring the natural rate of interest or the desired stock of capital.

An Indiana University Northwest Research monograph (available on request) shows that significant empirical evidence exists in support of the contention that  $k^*$  is in the neighborhood of 2 for "normal" interest rates and slightly above 2 in periods of "high" real interest rates. Firms act as if they adopted an expansionary mode when  $k > k^*$  and rising, while under identical macro conditions or phases of the business cycle firms tend to adopt a long-run contractionary mode when  $k < k^*$  and falling. Table 3 shows that  $k$  is less than 2 in most cases.

If our theory is true, then Northwest Indiana cannot attain a long-run growth path, or indeed "full" recovery and "full" employment, unless  $k \geq k^*$  for long enough periods of time to stimulate new capital formation and entrepreneurial gains which do not become expropriated by labor. Such is not currently the case.  $\square$

**Table 3**  
Northwest Indiana Historical Series and Long-Run Forecasts

|                                          | 1964   | 1970   | 1980   | 1981   | 1982   | 1983   | 1984   | 1985   |
|------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total income in billions                 | —      | 2.467  | 6.642  | 6.955  | 6.454  | 6.686  | 7.271  | 7.974  |
| Total payroll                            | 1.0556 | 1.548  | 4.369  | 4.513  | 4.007  | 4.907  | 5.191  | 5.711  |
| Nonmanufacturing payroll                 | .299   | .528   | 1.959  | 1.994  | 1.857  | 2.503  | 2.585  | 2.871  |
| Manufacturing payroll                    | .776   | 1.020  | 2.410  | 2.519  | 2.149  | 2.404  | 2.606  | 2.839  |
| Value added, manufacturing               | 1.739  | 2.018  | 4.341  | 4.808  | 3.467  | 4.364  | 5.018  | 5.511  |
| Value added, primary metals              | 2.234  | 1.744  | 1.352  | 1.513  | 1.424  | 1.773  | 1.818  | 1.911  |
| Value added per ton primary metals       | 43.74  | 42.05  | 87.91  | 96.04  | 95.09  | 97.75  | —      | —      |
| Average wage primary metals              | 7.951  | 9.688  | 24.318 | 27.695 | 27.588 | 27.071 | —      | —      |
| Percent mark-up primary metals           | 76.61% | 66.83% | 49.93% | 45.18% | 43.10% | 49.91% | —      | —      |
| Investments as percent of value added    | 21.67% | 19.97% | 17.91% | 18.90% | 19.93% | 19.12% | —      | —      |
| Management as percent of work force      | 17.26% | 20.60% | 21.09% | 20.56% | 19.19% | 19.81% | —      | —      |
| Manufacturing production workers         | 84,940 | 80,501 | 72,330 | 72,060 | 60,591 | 62,040 | 64,152 | 66,348 |
| Value added over payroll, manufacturing  | 2.241  | 1.978  | 1.801  | 1.909  | 1.613  | 1.899  | 1.989  | 2.011  |
| Value added over payroll, primary metals | 2.234  | 1.744  | 1.352  | 1.513  | 1.424  | 1.773  | —      | —      |

## Jeffersonville- New Albany (Louisville Area)

Fay Ross Greckel

*Professor of Economics, Indiana University  
Southeast*



This has been a year of economic recovery in the Louisville area. As usually happens in the early phases of a cyclical upswing, the gains were uneven: some sectors grew rapidly, others grew slowly, and employment lagged behind.

Housing and autos, the two sectors that fell the furthest during the preceding three or four years, showed the most dramatic improvement in 1983. The construction index in Table 1, for example, shows that construction activity peaked in 1979 at 151% of its 1967 level. By 1982 the index had plummeted below the 1967 base. During the first two quarters of 1983 the index regained half the points it had lost during the previous three years, and during the third quarter the construction index rose above its 1979 level.

Other indicators also point to a strong upswing in housing activity. Jefferson County, Kentucky, which includes the city of Louisville, issued three times as many building permits for residential units in the first nine months of 1983 as in the same period in 1982. The improvement in Indiana portion of the metropolitan area was somewhat more modest; still, Clark and Floyd Counties' 1983 residential building permits averaged 45% above the 1982 level. Similarly, realtors in these three counties reported a 50% increase in the number of homes sold. In fact, it appears that the 1983 real estate sales volume in Jefferson County will total more than 80% of the 1979 volume, while the dollar value of all property sold in that county is likely to be the highest on record.

Automobile sales in the three counties increased about 25% over last year, although that still leaves sales some 40%

below the record levels of 1978. Louisville automotive production also turned upward in 1983, with the Ford Ranger truck plant now operating at a full overtime level. Slow sales of large trucks have kept Louisville's second Ford truck plant operating well below capacity, but Ford is predicting a 33% increase in large truck sales for 1984.

Industrial production in general improved modestly in 1983. The industrial production index (Table 1) rose from a low of 98% of the 1967 base level in early 1983 to 103% during the third quarter of the year. Manufacturing employment repre-

earlier—but still 36,000 below the 1979 average.

Not surprisingly, manufacturing accounts for two-thirds of these job losses. Many of these job losses are cyclical, and the positions will reopen as both the local and national economies continue their recovery. Many other jobs have been lost permanently, however, as a result of plants closing, or firms becoming leaner in the face of stiff competition, or factories switching to more automated production processes. These structural changes will present major challenges to the Louisville economy in the years ahead. Some prognosticators seem optimistic that good substitute jobs will become available, but the majority outlook at present is more pessimistic. The primary concerns are that the better-paid new jobs will be rather few and will require very different skills from those acquired by the currently unemployed labor force. Most new jobs seem likely to be in nonmanufacturing, particularly the service sector, where average pay is much lower.

To the extent that the pessimists are correct, the Louisville area—and especially the families affected—will continue to face high social costs for a good many years. Virtually all social agencies reported a dramatic increase towards the end of 1983 in the demand for their services and in symptoms of major stress, such as spouse abuse and child abuse. In some areas the increase has halted in recent months, with service needs leveling off but not abating.

Table 2 also shows local unemployment rates, which, because of the difficulty of obtaining hard data at the local level, are less reliable statistics than the employment totals. These rates dropped sharply in 1983—particularly for residents of Clark and Floyd Counties. Unfortunately, since employment gains were limited this year, much of the statistical drop in unemployment is due to unemployed residents dropping out of the labor force (or to statistical error). In the months ahead, the local unemployment rates may stabilize, or even rise, if these discouraged workers move back into the labor force more rapidly than suitable jobs become available.

**Table 1**  
Economic Indexes, Louisville Area, 1979-1983  
(Seasonally adjusted: 1967 = 100)

| Time Period | Industrial Production | Trade and Services | Construction |
|-------------|-----------------------|--------------------|--------------|
| 1979        | 120.7                 | 150.1              | 150.6        |
| 1980        | 107.1                 | 141.1              | 122.8        |
| 1981        | 105.8                 | 142.7              | 122.3        |
| 1982        | 98.4                  | 143.7              | 97.7         |
| 1983:1      | 97.8                  | 146.5              | 128.4        |
| :2          | 99.0                  | 149.1              | 119.0        |
| :3          | 103.0                 | 144.4              | 156.9        |

Source: Research Department, Louisville Area Chamber of Commerce.

sents a major component of this index and, since production at many firms has become less labor intensive—and most employers work existing laborers overtime before undertaking extensive recalls—the index almost certainly understates the 1983 increase in industrial output.

Employment in the five-county metropolitan area (Clark and Floyd Counties in Indiana and Jefferson, Oldham, and Bullitt Counties in Kentucky) shows only slight improvement, but at least it appears to be moving in the desired direction after three years of steady decline. As Table 2 shows, total nonagricultural employment peaked at 402,700 in 1979 and then declined in 1980, 1981, and 1982, reaching a nadir of 359,700 (seasonally adjusted) in the fourth quarter of 1982. By the third quarter of 1983, there was a gain of approximately 6,700 jobs, leaving total employment just a few hundred jobs higher than one year

Table 2  
Louisville Area Employment and Unemployment, 1979-1983<sup>1</sup>

| <i>Louisville<br/>Metropolitan<br/>Area<br/>(Five Counties)<sup>2</sup></i> | <i>Total<br/>Nonfarm<br/>Employment</i> | <i>Manufacturing<br/>Employment</i> | <i>Unemployment<br/>Rate (%)</i> |
|-----------------------------------------------------------------------------|-----------------------------------------|-------------------------------------|----------------------------------|
| 1979                                                                        | 402,700                                 | 109,400                             | 5.2                              |
| 1980                                                                        | 391,700                                 | 100,300                             | 7.9                              |
| 1981                                                                        | 383,400                                 | 96,500                              | 9.0                              |
| 1982:1 <sup>3</sup>                                                         | 375,500                                 | 93,300                              | 10.6                             |
| :2                                                                          | 370,400                                 | 88,300                              | 12.6                             |
| :3                                                                          | 366,000                                 | 85,600                              | 11.3                             |
| :4                                                                          | 359,700                                 | 79,500                              | 12.5                             |
| 1983:1                                                                      | 364,400                                 | 87,600                              | 10.7                             |
| :2                                                                          | 364,400                                 | 83,900                              | 11.3                             |
| :3                                                                          | 366,400                                 | 85,000                              | 9.9                              |
| <i>Clark and Floyd Counties</i>                                             |                                         |                                     |                                  |
| 1979                                                                        | 46,800                                  | 12,100                              | 6.3                              |
| 1980                                                                        | 47,100                                  | 11,800                              | 8.3                              |
| 1981                                                                        | 48,200                                  | 12,300                              | 10.6                             |
| 1982                                                                        | 44,500                                  | 10,400                              | 13.1                             |
| 1983:1                                                                      | 44,200                                  | 9,800                               | 12.1                             |
| :2                                                                          | 44,200                                  | 10,200                              | 9.7                              |
| :3                                                                          | 43,800                                  | 10,200                              | 8.2                              |

1. The employment data refer to establishments located within the area cited; the unemployment data refer to residents of the area.

2. Includes Floyd and Clark counties in Indiana, and Jefferson, Oldham, and Bullitt counties in Kentucky.

3. All quarterly data are seasonally adjusted.

Barring any major unforeseen developments, employment gains should be much stronger in 1984. As the economy continues to strengthen, more and more firms will be expanding their work forces. Output and employment will increase in both the manufacturing and nonmanufacturing sectors. General Electric, for example, plans to recall 1,400 workers in January, and further gains should occur later in the year, as the demand for appliances for newly built homes and ten-year-old apartments materializes. Housing and auto sales should continue strong, unless interest rates unexpectedly surge upward again. Consumer spending, which rose rather modestly during most of 1983, should strengthen by the end of the year and continue to rise during 1984. In short, 1984 promises to be a year of continuing and strengthening recovery. However, as noted, structural problems will remain, with attendant hardships for many and with an ongoing need for efforts in economic development, for job counseling and job retraining, and for compassionate concern for the families still waiting for the recovery to materialize for them. □

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